

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte TETSUYA IIZUKA

Appeal No. 2002-0501
Application No. 08/556,427

ON BRIEF

Before HAIRSTON, FLEMING, and BARRY, *Administrative Patent Judges*.
BARRY, *Administrative Patent Judge*.

DECISION ON APPEAL

A patent examiner rejected claims 1, 3-6, 8-10, 12 and 13. The appellant appeals therefrom under 35 U.S.C. § 134(a). We reverse.

BACKGROUND

The invention at issue on appeal relates to capturing images at different aspect ratios. Although television broadcasting is mainly carried out at an aspect ratio of 4:3, high definition television broadcasting at an aspect ratio of 16:9 is becoming popular. (Spec. at 1-2.) Consequently, video cameras "have been required to be matched with the above two aspect ratios." (*Id.* at 2.)

Accordingly, the appellant's solid state imaging device includes an imaging area having photosensitive elements arranged in a matrix according to a 16:9 aspect ratio. Vertical registers transfer signal charges in respective vertical lines of the photosensitive elements to a horizontal register. (*Id.* at 1, 21.) In turn, the horizontal register transfers the signal charges to an output section. A signal according to the 16:9 aspect ratio is outputted "in a usual manner." (*Id.* at 1.) A signal according to a 4:3 aspect ratio, however, is outputted by discharging signal charges in right and left unnecessary portions in the image area in a horizontal blanking period. (*Id.*)

A further understanding of the invention can be achieved by reading the following claim.

6. A method of outputting necessary signal charges generated in a central portion of the image area of a solid state imaging device as an image signal, said image area divided into three portions comprising a first edge portion, a second edge portion opposite to said first edge portion, and said central portion arranged between said first and second edge portions, said method comprising the steps of:

combining a first unnecessary signal charges generated in said first edge portion and a second unnecessary signal charges generated in said second edge portion in said horizontal register during a horizontal blanking period,

outputting said combined first and second unnecessary signal charges from said horizontal register during said horizontal blanking period, and

outputting said unnecessary signal charges from said horizontal register during a horizontal effective period; and

draining an excess of said mixed signal charges.

Claims 1, 3-6, 8-10, 12 and 13 stand rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,491,512 ("Itakura"); U.S. Patent No. 5,036,397 ("Nagabusa"); and U.S. Patent No. 5,486,859 ("Matsuda").

OPINION

Rather than reiterate the positions of the examiner or the appellant *in toto*, we address the point of contention therebetween. Admitting that "the combination of Itakura '512 and Nagabusa '397 does not explicitly . . . drain[] an excess of the mixed signal charges," (Examiner's Answer at 5), the examiner asserts, "Matsuda '859 teaches that it is conventionally well-known in the art to use 'a drain' . . . for draining an excess of unnecessary charges (see col. 8, lines 5-10 and lines 30-63 of Matsuda '859; where the steps draining of an excess of unnecessary charges are taught)." (*Id.* at 9.) Admitting that "*Matsuda* discloses a drain for draining an unnecessary charge," (Reply Br. at 1), the appellant argues, "[n]owhere in the *Matsuda* is it disclosed or suggested to drain only an excess charge from a horizontal register. To the contrary, *Matsuda* drains *all* unnecessary charges into a drain." (*Id.* at 1.) In addressing the point of contention, the Board conducts a two-step analysis. First, we construe the claims to determine

their scope. Second, we determine whether the claims as construed would have been obvious.

Claim Construction

"Analysis begins with a key legal question -- *what* is the invention *claimed*?" *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1567, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987). "The general rule is, of course, that terms in the claim are to be given their ordinary and accustomed meaning." *Johnson Worldwide Assocs., Inc. v. Zebco Corp.*, 175 F.3d 985, 989, 50 USPQ2d 1607, 1610 (Fed. Cir. 1999) (citing *Renishaw PLC v. Marposs Societa Per Azioni*, 158 F.3d 1243, 1249, 48 USPQ2d 1117, 1121 (Fed. Cir. 1998); *York Prods., Inc. v. Central Tractor Farm & Family Ctr.*, 99 F.3d 1568, 1572, 40 USPQ2d 1619, 1622 (Fed. Cir. 1996)). "It is well settled that dictionaries provide evidence of a claim term's 'ordinary meaning.'" *Inverness Med. Switz. GmbH v. Warner Lambert Co.*, 309 F.3d 1365, 1369, 64 USPQ2d 1926, 1930 (Fed. Cir. 2002) (citing *Texas Digital Sys. Inc. v. Telegenix Inc.*, 308 F.3d 1193, 1202, 64 USPQ2d 1812, 1818 (Fed. Cir. 2002); *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366, 62 USPQ2d 1658, 1662 (Fed. Cir. 2002)).

Here, independent claim 6 specifies in pertinent part the following limitations:
"combining a first unnecessary signal charges generated in said first edge portion and a

second unnecessary signal charges generated in said second edge portion in said horizontal register during a horizontal blanking period, . . . and draining an **excess** of said mixed signal charges." (Emphasis added.) Claims 1 and 10, the other independent claims, include similar limitations.

The ordinary meaning of the adjective "excess" is "more than the usual, proper, or specified amount." *Webster's Ninth New Collegiate Dictionary* 432 (1990). Giving the limitations its ordinary meaning, the claim requires draining only the portion of mixed, unnecessary signal charges that exceeds the usual, proper, or specified amount. This meaning is consistent with the appellant's specification, which discloses that mixed signal charges "exceeding the allowable value are discharged into the drain region. . . ." (Spec. at 13.)

Obviousness Determination

Having determined what subject matter is being claimed, the next inquiry is whether the subject matter would have been obvious. "In rejecting claims under 35 U.S.C. Section 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness." *In re Rijckaert*, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993) (citing *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992)). "A *prima facie* case of obviousness is established when the

teachings from the prior art itself would . . . have suggested the claimed subject matter to a person of ordinary skill in the art." *In re Bell*, 991 F.2d 781, 783, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)).

Here, the column of Matsuda cited by the examiner discloses "a second embodiment of the [reference's] invention according to its second aspect. This embodiment device comprises a drain 201 and a connecting channel 203 in addition to the arrangement of the first embodiment as shown in FIG. 1." Col. 8, ll. 16-20. Although the drain and channel are used to drain unnecessary signal charges, we are not persuaded that Matsuda drains only the portion of the unnecessary charges that exceeds the usual, proper, or specified amount. To the contrary, the reference appears to drain all unnecessary charges. Specifically, "[i]n this second embodiment, as shown in FIG. 7, in obtaining a narrow aspect ratio image, **unnecessary charges remaining in the first horizontal CCD 3 are discharged via the drain 201** when the charges are transferred from the first horizontal CCD 3 to the second horizontal CCD 5." *Id.* at ll. 38-42 (emphasis added). "Accordingly, . . . **charges unnecessary for a narrow aspect ratio image are prevented from remaining** in the first horizontal CCD 3, allowing a narrow aspect ratio image to be obtained." *Id.* at ll. 46-51 (emphasis added).

Absent a teaching or suggestion of draining only the portion of mixed, unnecessary signal charges that exceeds the usual, proper, or specified amount, we are not persuaded of a *prima facie* case of obviousness. Therefore, we reverse the obviousness rejection of claim 1; of claims 3-5, which depend therefrom; of claim 6; of claims 8 and 9, which depend therefrom; of claim 10; and of claims 12 and 13, which depend therefrom.

CONCLUSION

In summary, the rejection of claim 1, 3-6, 8-10, 12 and 13 are rejected under 35 U.S.C. 103(a) is reversed.

REVERSED

KENNETH W. HAIRSTON
Administrative Patent Judge

MICHAEL R. FLEMING
Administrative Patent Judge

LANCE LEONARD BARRY
Administrative Patent Judge

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